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ABSTRACT

In order to test claims made regarding the Degrees of Reading Power Test (DRP), a study posed two research questions: (1) How well does the DRP correlate with the more venerable Stanford Achievement Test (SAT)? and (2) How well do these instruments predict students' academic classroom achievement? Three hundred sixty-nine students from two middle schools in Lake County, Florida took both the DRP and SAT tests. These scores were correlated with students' final first-semester grades in science, language arts, and social studies. Results showed that the DRP correlated strongly with the SAT, but that both instruments were poor-to-moderate predictors of students' classroom achievement, implying that teachers should use more than a standardized test figure to measure student achievement or to predict classroom performance. (SR)

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Teachers as Researchers: Does the DRP Predict Student Achievement?

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Abstract

This study examined correlations between the Degrees of Reading Power Test (DRP) and the Stanford Achievement Test (SAT). It also correlated DRP and SAT scores with students' academic performance.

Two questions were asked: How well does the newer DRP correlate with the more venerable SAT? How well do these instruments predict students' academic classroom achievement?

This study found that the DRP correlated strongly with the SAT, but that both instruments were poor-to-moderate predictors of students' classroom achievement.

Correlations were highest between the DRP/SAT and science; they were lowest between the DRP/SAT and language arts.

It was suggested that teachers use more than a standardized test figure to measure student achievement or predict classroom performance.

Introduction

The Degrees of Reading Power Test (DRP) is both an enigma and a prodigy: it is enigmatic in its treatment of reading scores and prodigal by casting its promotional nets so far and wide that it catches all the administrative fish. Schooling fish.

The authors of the DRP cite four objectives for their instrument: to measure students' current reading achievement levels; to determine the most difficult material the students can read on independent, instructional, and frustration levels; to measure gains in reading comprehension (pre-test/post-test); and to help diagnose reading deficiencies.

That the DRP is prodigal is, willy nilly, accepted; enough school districts have adopted it to make it so. But what about the enigma?

The DRP claims to be a true criterion-referenced reading test. It claims to be able to match students with appropriate reading materials. It claims to make grade-level equivalency obsolete.

Is the DRP everything it purports to be?

Some reviewers think not. Hanna, in Buro's, writes: "The obstacles to sound criterion referencing of reading comprehension may well be insurrmountable." And Bruning, also in Buro's, writes: ". . . the increasing use of the DRP for making instructional judgements about students compels the early gathering and reporting of the DRP's utility as a predictor of reading effectiveness in classroom settings."

Bruning strikes a major chord here--there may be an underlying disharmony to the DRP: it may be used to make "judgements about individual students."

In fact, the DRP is used to make judgements about students. It is used, for instance, to group students in academic classes.

Accordingly, one question seems self-evident: How well does the DRP predict student achievement?

Purpose and Methodology

This project examined two issues: first, how well does a newer measure of reading achievement (DRP) correlate with an older measure, namely the Stanford Achievement Test; and second, what are the respective correlations between these instruments and students' classroom performance?

This study encompassed 50 seventh-grade and 64 eighth-grade students at a middle school in Lake County, Florida.

Both the DRP and SAT tests were given to students at almost the same time--Spring, 1987. The DRP score computed in this study was the mid-instructional score; the SAT score was the reading comprehension score (scaled SC).

Academic achievement was measured in two subjects--science and language arts. Achievement was considered to be the students' final first-semester grades in December, 1987.

All seventh-grade students included in this study shared the same teachers for science and language arts; all eighth-grade students, similarly, shared only two teachers for these subjects. Eliminated from this study were ESE, AE (Alternative Education), and any students who did not have these four teachers (two 7th and two 8th) for science and language arts.

DRP, SAT, science and language arts scores were recorded for each student. Correlation cooefficients were obtained for the following pairings: DRP-SAT, DRP-SCI, DRP-LA, SAT-SCI, and SAT-LA.

Additionally, this study was extended to another middle school in Lake County. The identical procedures were followed, with a single exception--the SAT score is total reading (scaled SC) and not reading comprehension. Further, the academic subject, social studies, was included. Also, the sample size of this school's study is significantly larger than that of the original.

Results and Conclusions

The DRP correlated strongly with the venerable SAT; correlations ranged from .72 to .76. However, the correlations reported here do not approach the figures claimed by the DRP publishers. The DRP technical manual, according to Bruner, reports a correlation with the California Achievement Test (reading comprehension) of .85 for an urban sample.

Both the DRP and SAT correlated positively with grades in academic classes. Correlations were highest between the DRP/SAT and science, and lowest between the DRP/SAT and language arts.

The results of this study did not indicate the clear superiority of either the DRP or SAT in predicting students' academic achievement.

Included here is a summary of the statistics.

Analysis of the Data

School A

7th grade (n=50)

	DRP	SAT	LA	SCI
Mean	58.46	659.38	81.73	83.40
Median	59.00	658.00	82.50	86.50
Standard Deviation	10.44	49.39	7.77	10.88

Pearson Correlation	DRP	SAT	LA	SCI
DRP	-	.72	.20	.66
SAT	.72	-	.24	.56

8th grade (n=64)

	DRP	SAT	LA	SCI
Mean	68.23	664.97	85.69	84.20
Median	68.50	658.86	86.00	85.00
Standard Deviation	11.94	37.79	7.48	9.71

Pearson Correlation	DRP	SAT	LA	SCI
DRP	-	.76	.38	.60
SAT	.76	-	.52	.62

School B

6th grade (n=106)

Pearson Correlation	DRP	SAT	LA	SCI	SS
DRP	-	.73	.54	.63	.52
SAT	.73	-	.66	.60	.54

7th grade (n=149)

Pearson Correlation	DRP	SAT	LA	SCI	SS
DRP	-	.76	.66	.68	.58
SAT	.76	-	.61	.62	.54

DRP--Degrees of Reading Power (mid-instructional)
SAT--Stanford Achievement Test
School A: Reading Comprehension (scaled SC)
School B: Total Reading (scaled SC)

Implications for Teaching

The results of this study indicate that there is a positive, if sometimes slight, correlation between reading achievement scores and grades in academic classes. But any fool could have told you that. It doesn't take all the brains in the world to figure out that kids who read well tend to succeed in school.

But how many students are we missing because we assign them a number; because we assign them a DRP or SAT score and, based solely on that, track them into special classes; because we look at a number, consider it sacrosscant, and ignore everything else?

Does character count? Do determination and commitment? Does IQ count for more than I will?

The results of this study suggest several implications for teaching.

Since the DRP and SAT correlate rather highly, and seem to similarly predict student academic achievement, why give both tests? Why take time away from classroom instruction to test what you may already know from another test?

Further, considering that both the DRP and SAT have positive, but quite uneven, correlations with students' daily achievement in the classroom--meaning that these tests don't measure character, for instance, nor determination and desire--we suggest that you not rely only on a standardized test number to make student assessments. We suggest you also look at classroom performance.

A student's accomplishments in school, day after day, count for more than any standardized test score yet devised.

Should we measure students by the quantity of their test numbers or by the quality of their character?

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